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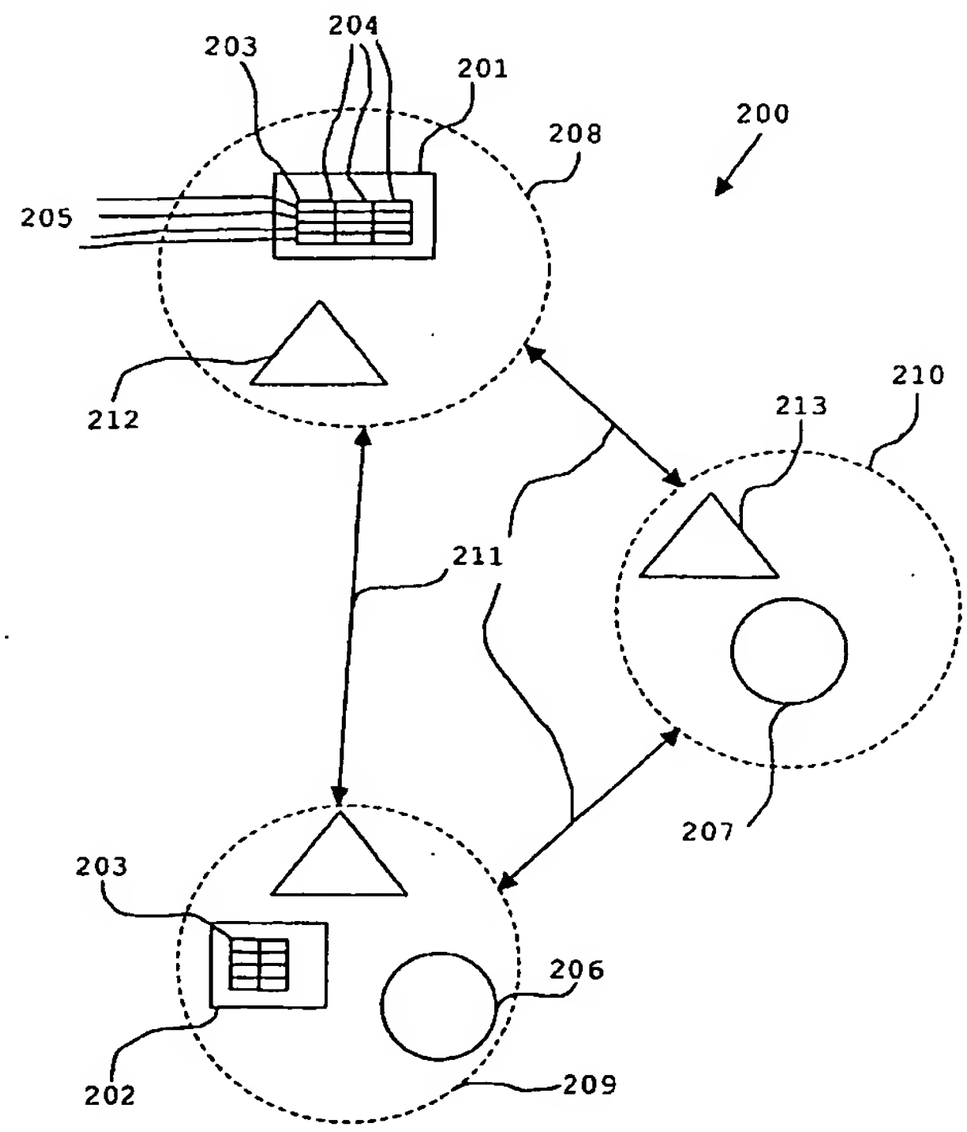
(54) Title: A SHARED STORAGE NETWORK SYSTEM AND A METHOD FOR OPERATING A SHARED STORAGE NETWORK SYSTEM



(57) Abstract: A shared storage network system comprises at least one storage client and a plurality of storage servers, each providing a storage portion of the shared storage network system, each storage portion being divided into a plurality of sectors, each sector being divided into a plurality of blocks, a virtual block identifier being associated to each of the blocks such that the entirety of all of the virtual block identifiers of the blocks form a global block address space in which each of the virtual block identifiers is unique. The plurality of storage servers and the at least one storage client are grouped into a plurality of local area networks interconnected with preferred optical channels to form a global network. The at least one storage client is adapted to have read and/or write access to at least one block of at least one of the storage portions associated to one of the local area networks which differs from the local area network of the storage client. The plurality of local area networks are interconnected such that in case of a read or a write access of one of the at least one storage client to at least one of the blocks, the virtual block address of a block to which access is desired is translated into a physical block address to identify the physical block associated with the virtual block. The shared storage network system is further adapted to implement a storage data transmission scheme comprising an optical burst mode flow control and an optical stop-over burst transmission method.

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